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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/888,382	06/26/2001	Dennis G. Thibedeau	10473-785	9501

7590 12/18/2002

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EXAMINER
HE, AMY

ART UNIT	PAPER NUMBER
2858	

DATE MAILED: 12/18/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/888,382	Applicant(s) THIBEDEAU ET AL.	
	Examiner Amy He	Art Unit 2858	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *10/09/2002* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-25* is/are pending in the application.

4a) Of the above claim(s) *17-22* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-16 and 23-25* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *15 October 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *5,7,8,10*, 11, 14
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other:

DETAILED ACTION

Election/Restrictions

1. Applicant's election without traverse of Group I (Claims 1-16 and 23-25) in Paper No. 15 is acknowledged.

2. Claims 17-22 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a non-elected invention, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 15.

3. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Specification

4. The abstract is objected to because it contains informality legal phrase, "comprises" on line 3. Correction is required.

5. The specification is objected to because "an alternator output signal **113**" (page 4, last paragraph, line 2; page 5, lines 1 and 4) and "alternator output signal **151**" (page 6, lines 8, 12 and 14 etc.) are not shown in Figure 1. Corrections are required.

6. The oath or declaration is defective. A new oath or declaration in compliance with 37 CFR 1.67(a) identifying this application by application number and filing date is required. See MPEP §§ 602.01 and 602.02.

The oath or declaration is defective because:

(1) It does not identify the mailing or post office address of Paul A. Willems. A mailing or post office address is an address at which an inventor customarily receives his or her mail and may be either a home or business address. The mailing or post office address should include the ZIP Code designation. The mailing or post office address may be provided in an application data sheet or a supplemental oath or declaration. See 37 CFR 1.63(c) and 37 CFR 1.76.

(2) The citizenship of Richard J. Fachnrich is listed as "Uss".

Claim Objections

7. Claim 1 is objected to because a word, "load" is missing. Insert --load-- after "the" and before "has been" on line 7. Appropriate correction is required.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Salley et al. (U.S. Patent No: 5,254,952).

Referring to claims 4 and 16, Salley discloses a method for evaluating the operation of an alternator, comprising the steps of:

coupling a load (carbon pile assembly 30 in Figure 8) to the alternator(154 in Figure 7)(column 10, lines 33-41); and

detecting (or evaluating) the characteristics (or the operation) of an alternator output signal representative of an output of the alternator (155 in Figure 7, column 10, line 38).

Salley does not specifically disclose detecting (or evaluating) only after the load has been coupled to the alternator for a predetermined period of time.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Salley to detect or evaluate after a period of time in order to more accurately detect the alternator output signals by allowing some time for the output signals to be stabilized.

Referring to claim 5, Salley discloses the method of claim 4, further including a step of decoupling the load from the alternator after the load has been coupled to the alternator for a second predetermined period of time (i.e. when the timer times out a default time, the alternator test will be terminated, column 11, lines 3-7).

Referring to claims 1 and 2, Salley discloses a method for evaluating the operation of an alternator driven by a engine of a vehicle as discussed above for the rejection of claims 4 and 16, and further including the step of detecting (corresponding to the operator making sure that the engine speed is increased to the rpm prescribed by the manufacturer to ensure that the alternator is capable producing its maximum output, column 32, lines 20-24) a motor speed or an alternator speed and coupling (corresponsive to the operator pressing the start key 213, thus, loading the default value

to the alternator and start the alternator testing) the load upon the motor speed or the alternator speed reaching a predetermined level .

Referring to claim 3, Salley discloses the method of claim 1. Salley does not disclose a Nichrome coil as the load. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Salley to use Nichrome coil as the load, since choosing Nichrome coil as the load is only one among the numerous choices which is more dependent upon the desires and preferences of the user and the manufacturers.

Referring to claim 6, Salley discloses a system for evaluating the operation of an alternator driven by a motor comprising:

a load (carbon pile assembly 30 in Figure 8);

a terminal (terminal near 155 in Figure 7)for receiving an alternator output signal representative of an alternator characteristic;

a sensor (the operator) for generating a speed signal representative of an engine speed or an alternator speed;

a switch device (start key 213 in Figure 6) for selectively coupling the load to the alternator;

a controller (the combination of tester 200 in Figure 8 and an operator) for determining characteristics of the alternator output signal and for controlling operation of the switch device;

wherein, in response to the speed signal indicating the engine speed or the alternator speed reaching a predetermined level (i.e. when the operator senses that the

engine or alternator speed is at a certain level), the controller (the operator) generating a first switch operation signal (pressing the start key) to control the switch device (the start key) to couple the load to the alternator.

Salley does not specifically disclose that the controller determines characteristics of the alternator output signal after the load has been coupled to the alternator for a first predetermined period of time. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Salley's controller to determine characteristics of the alternator output signal after the load has been coupled to the alternator for a first predetermined period of time, for the same reasons asdiscussed above for the rejection of claim 1.

Referring to claim 7, Salley discloses the method of claim 6. Salley does not disclose a Nichrome coil as the load. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Salley to use Nichrome coil as the load, for the same reason as discussed above in the rejection of claim 3.

Referring to claims 8-9, Salley discloses the system of claim 6. Salley does not disclose a fan as a cooling device for dissipating the heat generated by the load. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Salley to use a cooling device, such as a fan, for cooling the load to improve accuracy of the determination of the operation of the alternator.

Referring to claim 10, Salley discloses the system of claim 6. Salley does not disclose that the system is contained within a housing of the size suitable to be hand held. It would have been obvious to a person of ordinary skill in the art at the time the

invention was made to modify Salley to make the system to be hand held, to ease the evaluating process.

Referring to claim 11, Salley discloses the system of claim 6, wherein the load is constructed to draw at least 50 amperes of current from the alternator (column 26, lines 1-10).

Referring to claim 12, Salley discloses the system of claim 6, wherein the controller generates a second switch operation signal to control the switch to decouple the load (i.e. terminating the alternator test) from the alternator after the load has been coupled to the alternator for a second predetermined period of time (i.e. when the timer times out a default time, the alternator test is terminated, column 11, lines 3-7).

Referring to claim 13, Salley discloses a system for evaluating the operation of an alternator, comprising:

a load (carbon pile assembly 30 in Figure 8);

a terminal (terminal near 155 in Figure 7)for receiving an alternator output signal representative of an alternator characteristic;

a switch device (start key 213 in Figure 6) for selectively coupling the load to the alternator;

a controller (the combination of tester 200 in Figure 8 and an operator) for determining characteristics of the alternator output signal and for generating a first switch operation signal to control the switch device to couple the load to the alternator (by the operator pressing the start key);

Salley does not specifically disclose that the controller determines the characteristics of the alternator output signal only after the load has been coupled to the alternator for a first predetermined period of time.

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Salley to determining characteristics of the alternator output signal only after the load has been coupled to the alternator for a first predetermined period of time, for the same reasons as discussed in the rejection of the method claim 4.

Referring to claim 14, Salley discloses the system of claim 13, wherein the controller generates a second switch operation signal to control the switch device to decouple the load from the alternator after the load has been coupled to the alternator for a second predetermined period of time (i.e. when the timer times out a default time, the alternator test is terminated, column 11, lines 3-7).

Referring to claim 15, Salley discloses the system of claim 13, wherein the alternator (154 in Figure 7) is used in an automotive vehicle to charge a battery (column 9, lines 27-33).

9. Claims 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Salley et al. (U.S. Patent No: 5,254,952), in view of Bertness (U.S. Patent No: 6,331,762),

Referring to claims 23-25, Salley discloses a system of claim 13. Salley does not disclose that the terminal receives the alternator output signal through a wireless link, such as an infrared wireless link or a radio wave wireless link.

Bertness suggests, "various types of inputs and outputs can be provided through non-physical connections such as radio frequency or infrared communication techniques"(column 11, lines 47-50).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to further modify Salley to use the wireless communication techniques, as taught by Bertness, to simplify the process of evaluating the operation of the alternator.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amy He whose telephone number is (703) 305-3360. The examiner can normally be reached on 8:30am-5pm Monday through Friday.
If attempts to reach the examiner by telephone are unsuccessful, the examiner's Supervisor, N. Le can be reached on (703) *308-0750*.

The official Fax numbers for the organization are (703-872-9318) Before-Final and (703-872-9319) After-Final Office actions. Any inquiry of a general nature relating to this application should be directed to the receptionist at (703) 305-4900.

AH
December 13, 2002

Christine K. Oda
Christine Oda
Primary Examiner